

MEASURING OUTCOMES & SYSTEMS INVESTMENTS: WEIA

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WORKFORCE EDUCATION INVESTMENT ACT

From [HB2158](#) (2019) Session law

► WORKFORCE EDUCATION INVESTMENT ACCOUNT

“Expenditures from the account may be used only for **higher education programs, higher education operations, higher education compensation, and state-funded student aid programs**. For the 2019-2021 biennium, expenditures from the account may be used for kindergarten through twelfth grade if used for career connected learning as provided for in this act.”

► WORKFORCE EDUCATION INVESTMENT ACCOUNTABILITY AND OVERSIGHT BOARD

“The purposes of the board are to:

- (a) **Provide guidance and recommendations** to the legislature on what workforce education priorities should be funded with the workforce education investment account;
- (b) **Ensure accountability** that the workforce education investments funded with the workforce education investment account are producing the intended results and are effectively increasing student success and career readiness, such as by increasing retention, completion, and job placement rates.”

WORKFORCE EDUCATION INVESTMENT ACT: PROGRAMS

Adapted from [HB2158](#) Session law

1. WASHINGTON COLLEGE GRANT – WSAC, ERDC
2. STUDENT LOAN RELIEF – WSAC, ERDC
3. **EXPANDING CAREER CONNECTED LEARNING OPPORTUNITIES**
– *WA STEM (with ERDC, SBCTC, LNI, OSPI)*
4. WASHINGTON STATE OPPORTUNITY SCHOLARSHIP – WSOS, ERDC, SBCTC
[WA STEM supports WSOS high-demand credential determination]
5. **WORKING CONNECTIONS CHILD CARE PROGRAM**
– *WA STEM, DCYF, SBCTC*
6. HEALTH PROFESSIONAL LOAN REPAYMENT PROGRAM – DOH, ESD
7. VETERAN AND NATIONAL GUARD TUITION WAIVERS – *Each eligible higher ed institution must submit a report every two years; could be further measured by ERDC*

WA STEM'S ANTIRACIST VALUES FOR DATA

WHAT

Measuring Systems

- Student outcomes are only for measuring systems' abilities or deficiencies
 - Measure *opportunities *then** participation
- Truth-telling and storytelling requires disaggregation

WHO

About Us, With Us

- Co-creation of tools and datasets
 - Measure the right things: start with community/family/ students
- Start with assets: gap-gazing is trauma

HOW

Data for Justice

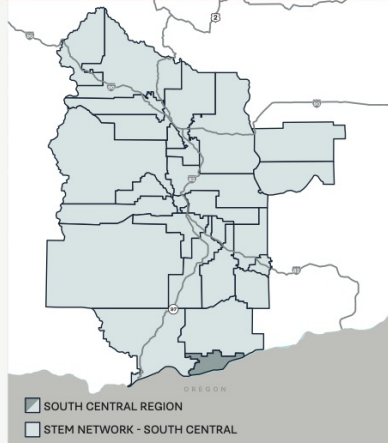
- Data should be used for system & practice improvement, not for blame or maintain status quo
- Data work has to be done in partnership to ensure system change & racial justice

STEM BY THE NUMBERS REGIONAL REPORTS

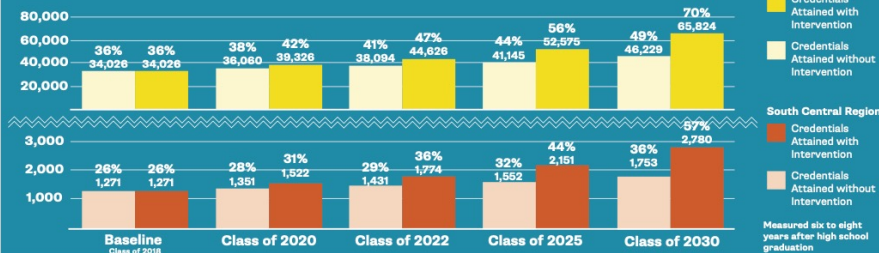
STEM BY THE NUMBERS: SOUTH CENTRAL REGION



The South Central Region is home to growing information and technology, healthcare, K-12 education, and agriculture industries, spanning from Ellensburg to Yakima. The region is made up of 26 school districts, 25 of which are members of the South Central STEM Network. The Network's business, education, and community partners are working to close credential attainment gaps, especially for students of color and students from low-income families. They aim to increase the number of local students who become IT professionals, trades professionals, industrial maintenance professionals, teachers, and healthcare professionals, which combined have 1,300 annual projected openings over the next five years.



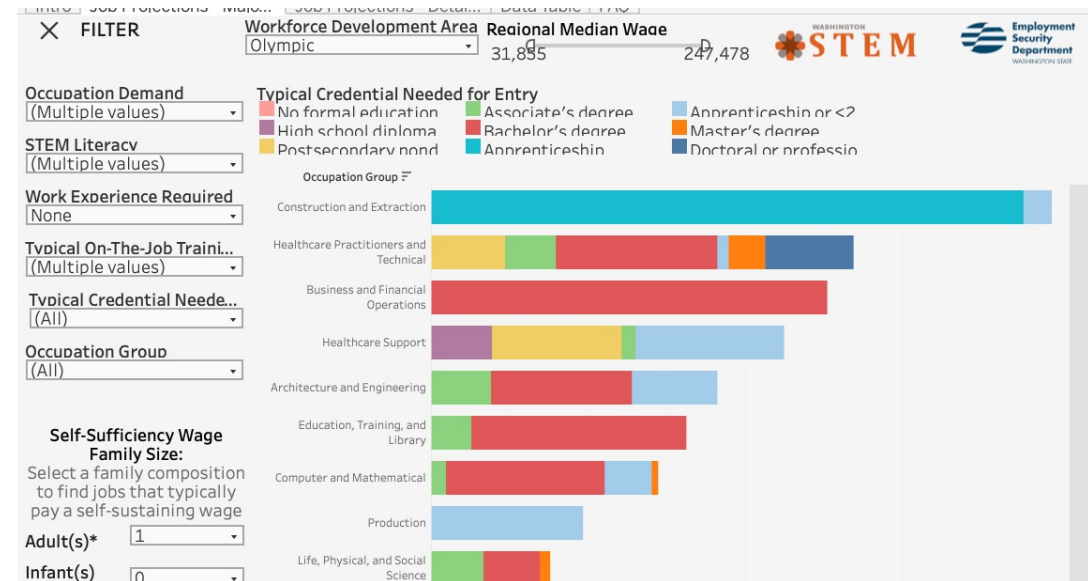
126 MORE CREDENTIALS PER YEAR = REGION ON TRACK



STUDENTS STAY LOCAL

- Regionalized understanding of:
 - K12 originators' outcomes
 - job demand + projections
 - average wages + self-sufficiency rates
 - credential needs + goals
 - student outcomes
 - credential opportunities + capacity
- Data from: ESD, LNI, UW Self-Sufficiency Report, OSPI, ERDC, WSAC

LABOR MARKET DATA DASHBOARD



WASHINGTON JOBS, POST-COVID: OUR [STILL] STRONG ECONOMY

What do we know (statewide):

1. In every region of the state, **over 60%** of the local, family-sustaining wage jobs will **require a postsecondary credential** (with more urban areas seeing 80-90% of jobs requiring a postsecondary credential)
2. **Over 80%** of the jobs that provide family-sustaining wages are in STEM **and/or require STEM literacy** (like carpenters, healthcare assistants, etc.)
Rural regions have thousands of open STEM and STEM-literate jobs a year, especially in healthcare, IT/computer science, and environmental & resource sciences (alternative energy, PUD, forestry management)
3. Rural regions of our state have seen their % of jobs that require credentials nearly **double or triple** in the last 30 years
4. WA has the most STEM job openings per capita of any state, especially among entry-level (young adult and career change level) jobs

Explore Regional Data at:

https://washingtonstem.org/focus_area/stembythenumbers/

<https://washingtonstem.org/labor-market/>

COVID-19 Unemployment Dashboard

(Un)Employment by Demographic

- Regionalized understanding of:
 - Which jobs were hardest hit or most insulated during Pandemic
 - Unemployment over time
 - By race, education level, gender, STEM occupation status
- Data from: Employment Security Department

Overview	Worker Characteristics	Highest # of Claims	Fewest # of Claims			
Worker Characteristics						
County	King County	Week Ending Dec 12, 2020				
	King County		State Total			
Race/Ethnicity	% of Claims	Claims	% of Population	% of Claims	Claims	% of Population
African American	13%	4,909	6.2%	7%	9,263	
American Indian	1%	273	0.6%	1%	1,915	
Asian	17%	6,566	18.3%	8%	11,728	9.5%
Latino or Hispanic	9%	3,649	8.4%	15%	20,977	10.0%
Pacific Islander	2%	711	0.7%	1%	2,121	0.6%
Two or More Races	4%	1,463	3.0%	3%	4,770	2.8%
White	48%	18,672	62.7%	59%	84,095	72.3%
Unknown	6%	2,492		5%	7,347	

	King County				State Total			
	% of Claims	Claims	% of Population	Average Annual Wage	% of Claims	Claims	% of Population	Average Annual Wage
Less than HS	6%	2,444	7%	\$35,039	10%	28,246	18%	\$65,738
HS Diploma/GED	26%	10,259	15%	\$53,109	34%	95,414	44%	\$98,655
Some College	23%	8,718	18%	\$55,174	23%	66,296	47%	\$102,879
Associates Degree	10%	3,822	8%	\$69,608	11%	30,226	20%	\$132,104
Bachelors Degree	21%	8,325	31%	\$99,380	14%	38,568	44%	\$188,452
Graduate or Professiona..	9%	3,498	20%	\$169,252	6%	16,266	26%	\$318,898
Unknown/Not Disclosed	4%	1,669		\$56,748	3%	9,414		\$105,565

UNEMPLOYMENT: COVID-19's INEQUITIES

What do we know (statewide):

1. In **every county** of the state, Black, Native, Latinx, and Pacific Islander workers have lost their jobs and *consistently* been overrepresented among insured unemployment claims, Notable exception is Latinx farmworkers in central Washington who mostly followed typical seasonal employment patterns despite higher COVID-19 infections and deaths among that population (i.e., Grant Co.)
2. Those with Bachelor's degrees have been by far the most insulated and those with Associate's are relatively insulated, in every county of the state; those with a high school diploma alone were overrepresented by **10-30%**
3. STEM-based jobs were *vastly* more insulated from unemployment and bounced back faster than non-STEM jobs in every single county.

CREDENTIAL OPPORTUNITIES BY REGION & INDUSTRY (CORI)

From [HB2158](#) Session law

- “Therefore, the legislature intends to create the new workforce education investment account, supported by professions that **depend on higher education**, that will expand existing investments to help people earn the credentials essential to **obtain family-wage jobs** and fill the seven-hundred forty thousand jobs of the future.”

Occupation Title KING COUNTY		Job Openings	Related Job Openings	Credential Production	Credential Gap
15-1252	Software Developers	15,260	8,661	2,395	-21,526
15-1254	Web Developers	2,530	18,214	1,508	-19,236
13-1082	Project Management Specialists	477	2,239	2,452	-264
17-2112	Industrial Engineers	465	57	88	-434
15-1221	Computer and Information Research Scientists	448	20,820	1,884	-19,384
17-2141	Mechanical Engineers	300	307	271	-336
17-2071	Electrical Engineers	252	357	487	-122
19-2041	Environmental Scientists and Specialists, Inclu..	250	1,344	392	-1,202
15-2041	Statisticians	162	20,876	525	-20,513
15-2051	Data Scientists	120	26,009	2,338	-23,791
19-3099	Social Scientists and Related Workers, All Other	102	2,033	396	-1,739
17-2081	Environmental Engineers	99	98	15	-182

WA JOBS REQUIRE HIGHER EDUCATION: PROGRAMS TO DEVELOP & GROW

What do we know (statewide):

- ▶ Creating and expanding *local* programs in high-demand credentials is one of the best ways to ensure that low-income and students of color access the training needed to access our state's best paying and most resilient jobs
- ▶ In the rural regions of the state, there is either *no* local programs for nursing and related healthcare credentials or *very constrained* capacity in those programs
- ▶ Many rural regions have *no* local programs for IT and computer science despite a high number of projected job openings.
- ▶ In our urban areas, there remains extremely constrained capacity in many STEM credential areas, even with several or dozens of local higher education institutions offering programs: computer science, registered nursing, engineering, and construction and technical trades.

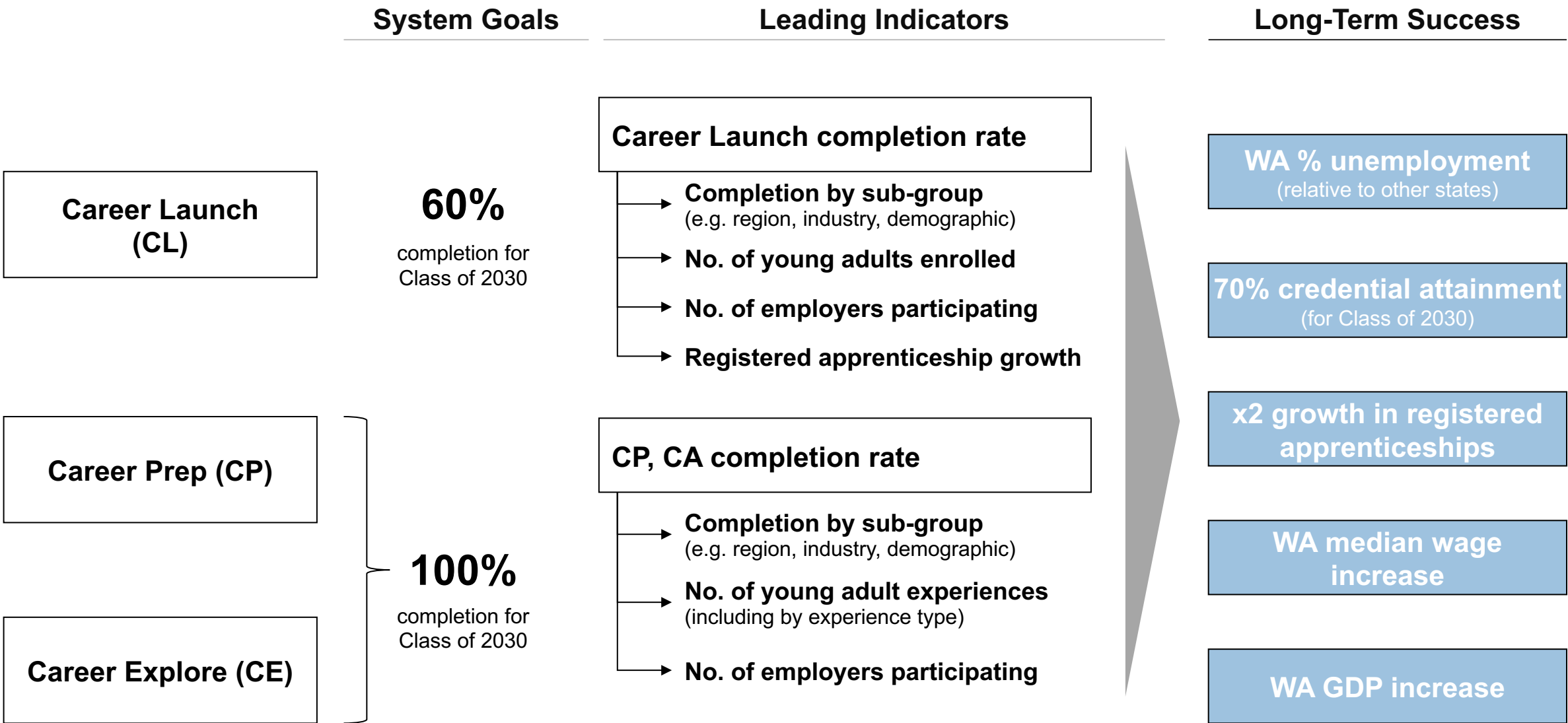


DATA DIVE

WEIA PROGRAMS

#3. EXPANDING CAREER CONNECTED LEARNING OPPORTUNITIES

CAREER CONNECT WASHINGTON GOALS



MEASURING CCW EARLY OUTCOMES

WA STEM has led and organized a data and measurement workgroup and we have drafted a CCL equity goal in line with the ESS HB 2158 legislation requiring the Cross Agency work group to collect and disaggregate program participation and outcomes data by:

race
income
ability
homeless youth
and other relevant categories

gender
rurality
foster youth
English language learner

Race, income, geography, gender, citizenship status, and other demographics and student characteristics will no longer predict the outcomes of Washington's students.

Career Connect Washington will build a career connected learning system that enables students who participate in Career Explore, Career Prep, and Career Launch to complete programs, attain sustaining-wage entry-level jobs, and reach family-sustaining wage careers (across industries and occupations) at equitable rates across population demographics.

2019-2020 Career Connect Washington Outcomes at a Glance

28

**Endorsed Career
Launch Programs**

21

**New Apprenticeship
Programs***

~10k

**Total Enrollees < age 30 in Career Launch +
Registered Apprenticeships programs***

↑ 1,145

**Increase in < age 30 RA
enrollments 7/18 to 7/20***

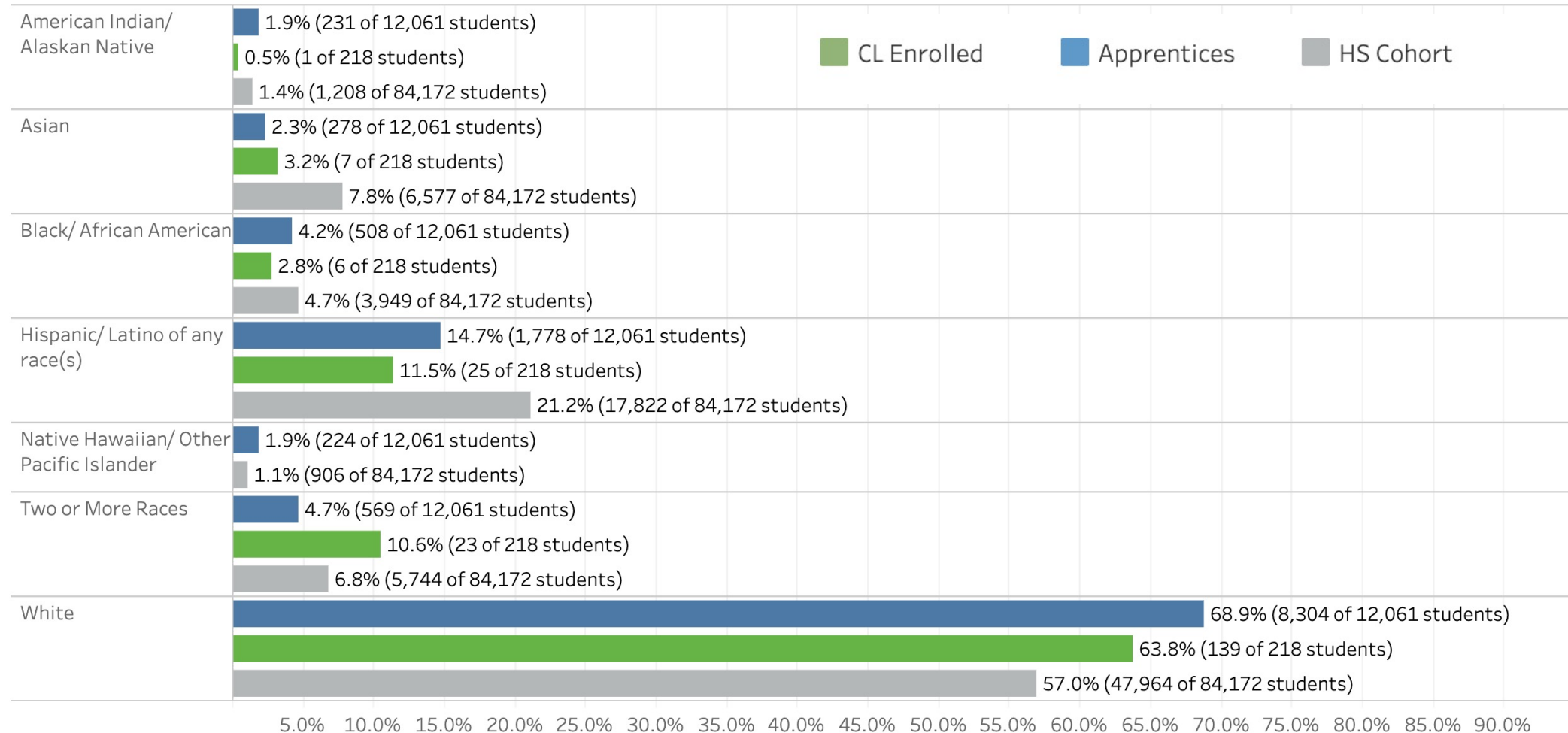
↑ 228

**Enrollees < age 30 in
Career Launch Programs**

* Apprenticeship numbers reflect total growth, influenced by a variety of factors, including economic expansion prior to the COVID-19 pandemic

CCW EQUITY METRICS: RACE

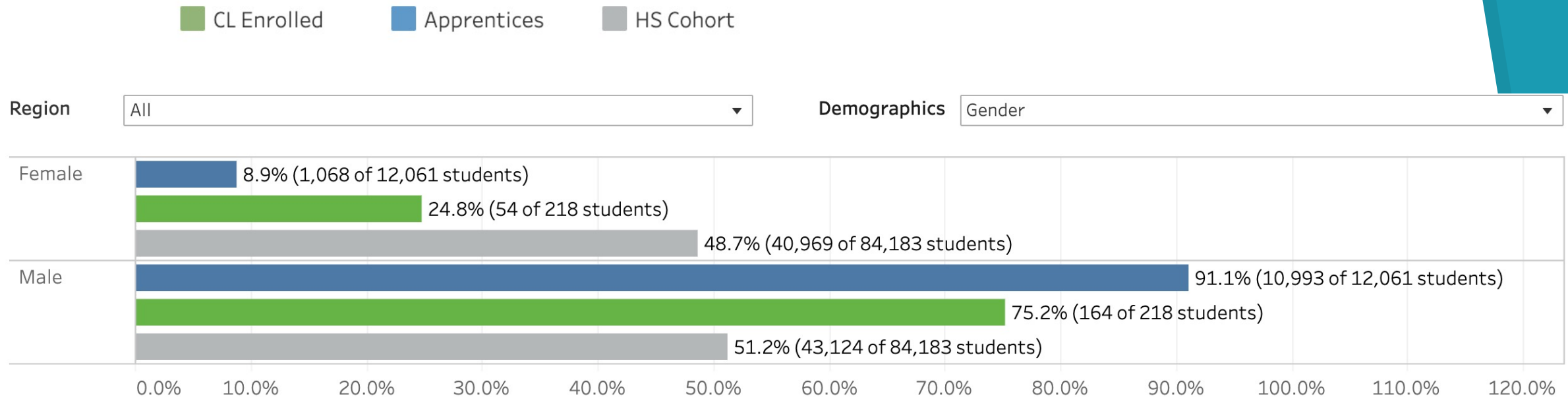
- ▶ We have some work to do with Latinx and Asian and NH/PI populations; students of color are better well-represented overall in CL endorsed programs



*Apprenticeship numbers reflect total growth, influenced by a variety of factors, including economic expansion prior to the COVID-19 pandemic. 17 OSPI Class of 2015 through 2019 with average 5-year adjusted cohort of 81,479 students; Average monthly active apprentices from Q1 2020 is 9,547; Career Launch enrollment Q3 2019-2020 academic year was 386 students.

CCW EQUITY METRICS: GENDER

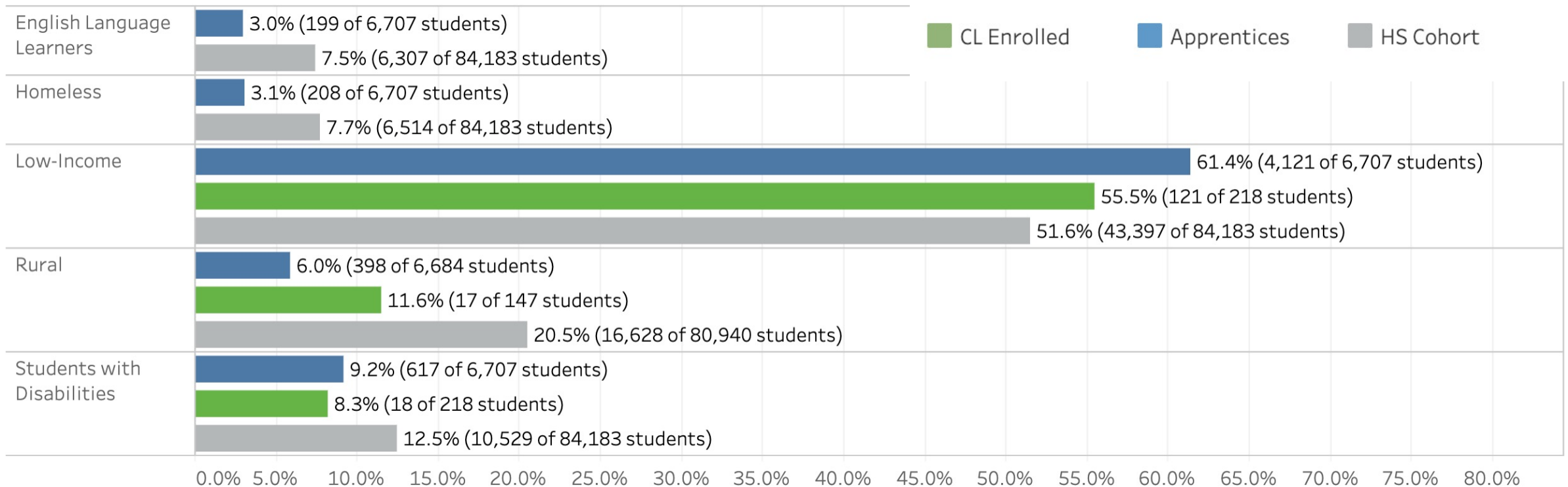
- ▶ New endorsed Career Launch programs are doing better at recruiting female students, but still room for improvement



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CCW EQUITY METRICS: OTHER DEMOGRAPHICS

- Rural students are *overrepresented* in newly created endorsed Career Launch programs; we have some work to do with low-income students, but newly created endorsed CL programs are doing fairly well so far



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CCW EQUITY METRICS: BY REGION, OCCUPATION/INDUSTRY

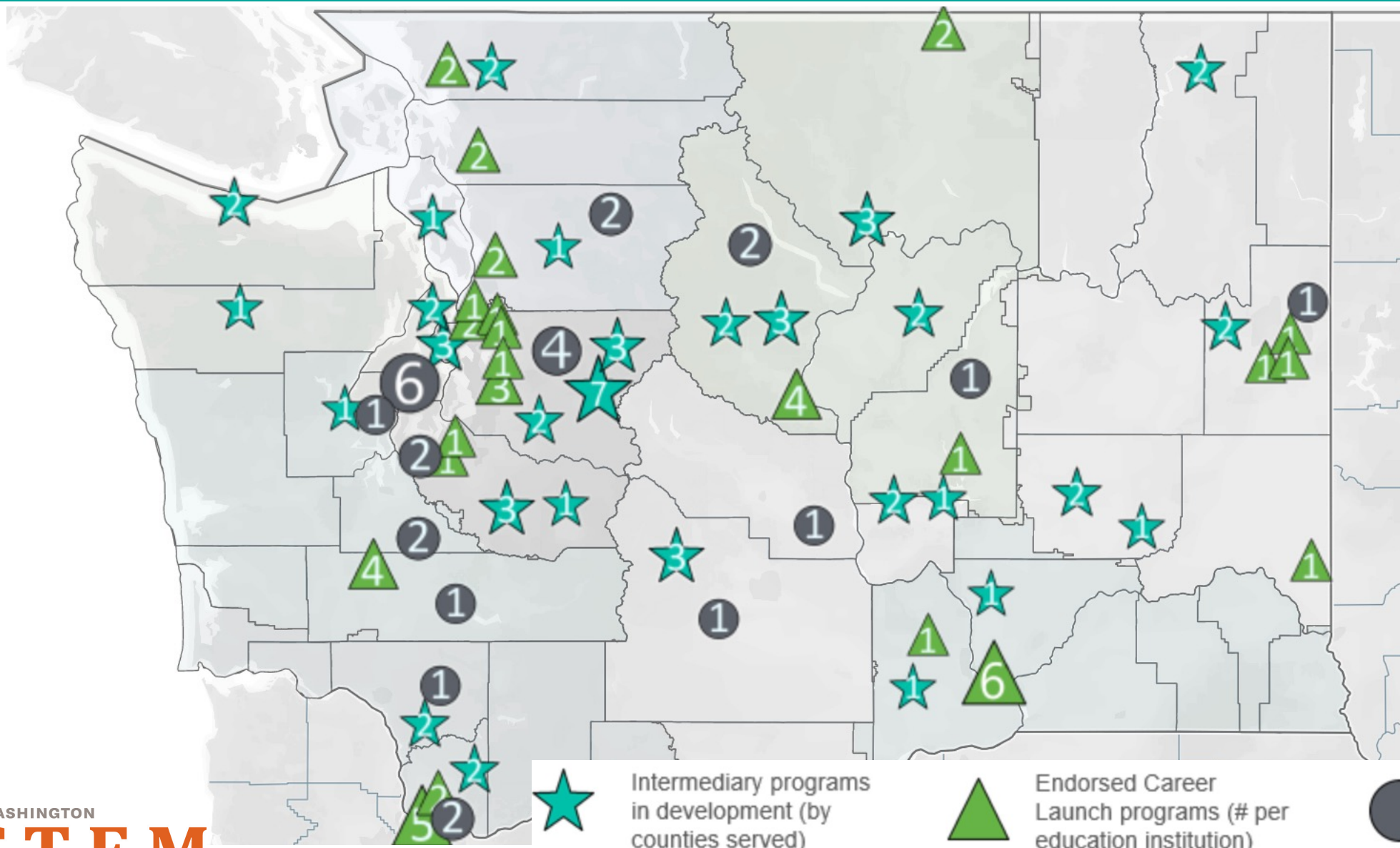
Apprenticeship enrollment of young adults <30 y/o from July 2019-June 2020.
 Apprenticeship numbers reflect total growth, influenced by a variety of factors, including a significant economic expansion prior to the COVID-19 pandemic.
 Career Launch program enrollment of young adults <30 y/o for the 2019-2020 academic year.
 OSPI HS graduation cohort of 2020.
 OSPI HS Cohort rurality is determined by school district locale designation. Rural is defined by the following locales:

Region	All
American Indian/Alaskan Native	All Capital Region ESD 113 Greater Spokane Inc./ Educational Service District 101 Mid-Columbia STEM Network/ Educational Service District 123 North Central Educational Service District 171 South Central WA STEM Network/ Educational Service District 105 SW WA Career Connected Learning Network/ Educational Service District 105
Asian	Washington Alliance for Better Schools/ Puget Sound Educational Service District 114 West Sound STEM Network/ Olympic Educational Service District 114 Workforce Snohomish/ Northwest Educational Service District 189
Black/ African American	
Hispanic/ Latino of any race(s)	14.7% (1,778 of 12,061 students)

Demographics	Race
Clark College	Diesel Technology 32 Automotive: HiTECC 5 Automotive: Toyota T-Ten 18 Semiconductor & Electronics Manufacturing Technician 16
Clover Park Technical College	Heating and Air Conditioning Refrigeration/Service Technician 70
Columbia Basin College	Applied Management-Agriculture (Bachelor) 50
Spokane Community College	SCC Automotive: Toyota T-TEN Program 16
A&D Fire Apprenticeship Committee	Sprinkler Fitter (Fire) 2
ABM Clark County Custodial Apprenticeship Committee	Facilities Custodial Services Technician I 25
ACTIV - Accelerated Career Training and Innovation	Software Developer Application 2
Aerospace Joint Apprenticeship Committee	Industrial Maintenance/Automation Technician 38
	Industrial Manufacturing Technician 12
	Machinist (Aircraft Oriented) 143
	Maintenance/Automation Technician (Youth) 13
	Manufacturing Precision Metal Fabricator 4
	Plastic Process Technician 3
	Production Technician (Youth) 99
	Tool and Die Maker 9
Alta Forest Products LLC.	Saw Filer 1
Apprenti	Cloud Operations Specialist 1 1
	Cloud Operations Specialist 2 4
	DATACENTER TECHNICIAN 2
	IT Support Professional 5
	Network Operations Developer 10
	Network Security Administrator 3
	Software Developer 1 27
	Software Developer 2 1

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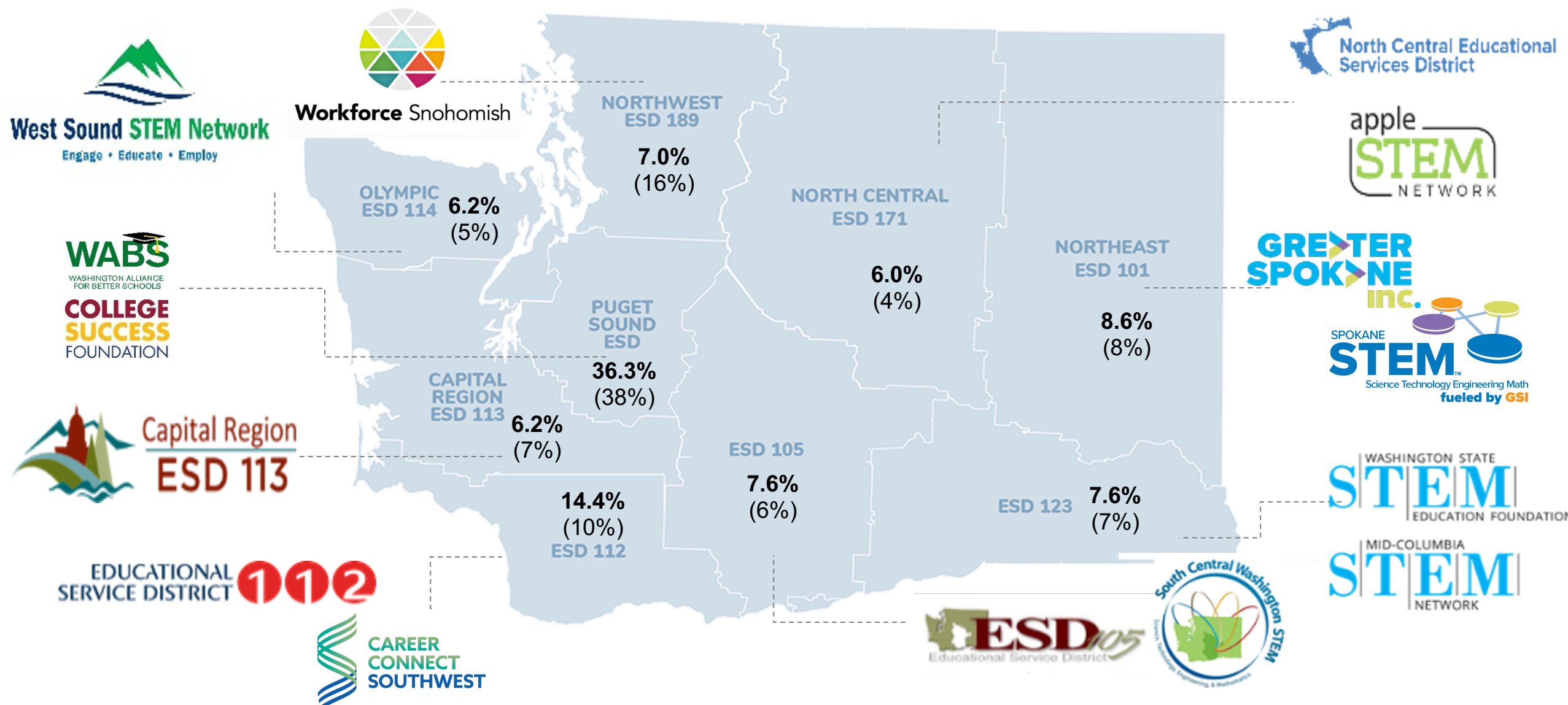
CCW EQUITY METRICS: GEOGRAPHIC PROGRAM DISTRIBUTION



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CCW EQUITY METRICS: GEOGRAPHIC FUNDING DISTRIBUTION

Distribution of public funds by CCW **X.X%** relative to K-12 student population (X.X%) by **REGION**





DATA IN-PROGRESS

WEIA PROGRAMS

#5. WORKING

CONNECTIONS CHILD

CARE PROGRAM

WORKING CONNECTIONS CHILD CARE PROGRAM: QUESTIONS TO ASK

WCCC helps families with low incomes pay for child care.

- ▶ How many intended students with children have used the subsidy? With what outcomes in terms of persistence, completion, and eventual employment and wages? By demographics? Compared to the outcomes of peers who did not use the subsidy or other reasonable comparisons? – **DCYF, SBCTC (possibly ERDC if needed)**
- ▶ Is the program enough funding for the intended student recipients? How does it offset or compare against household income and self-sufficiency wages? Does the program allow for the creation and maintenance of high-quality child care? – **WA STEM, DCYF, DOC**

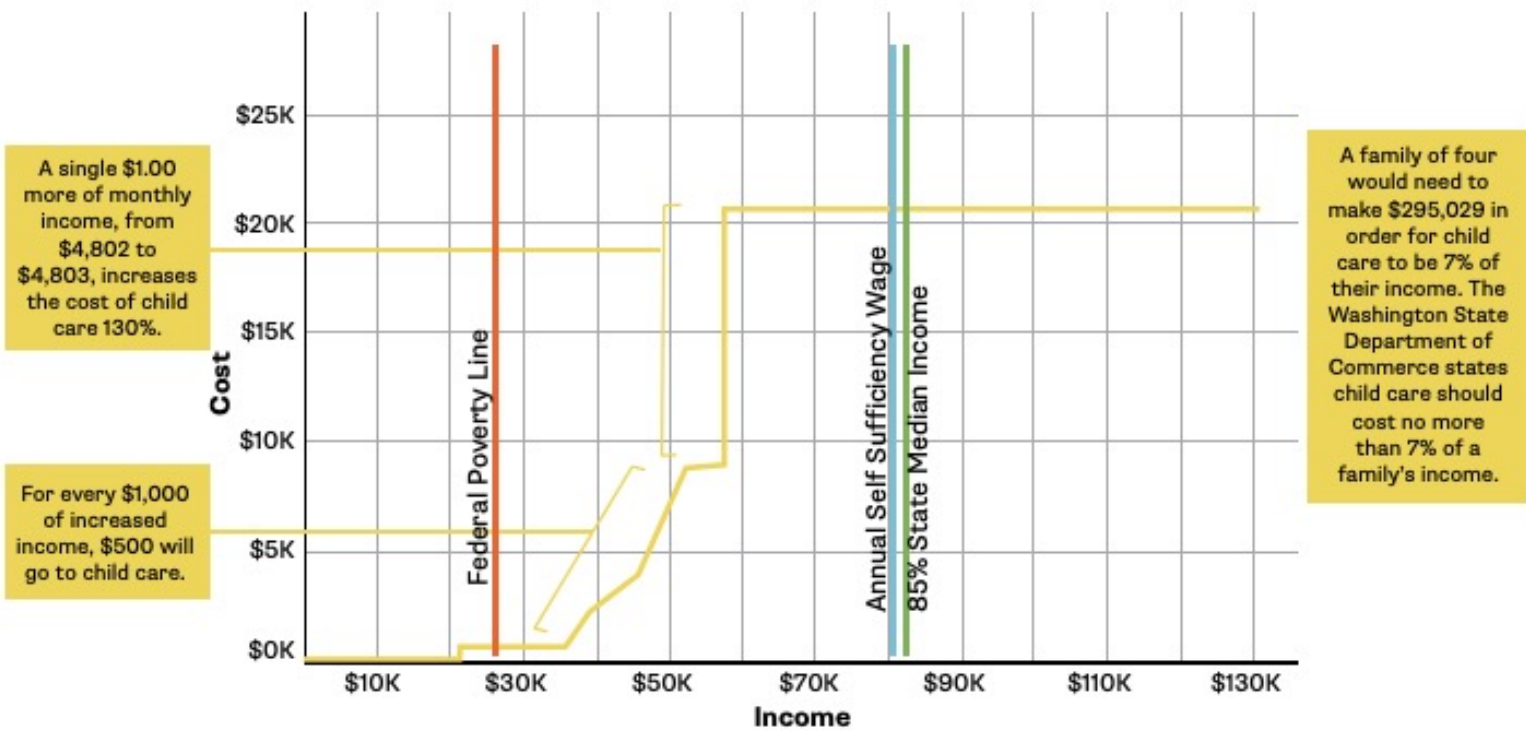
WASHINGTON STEM'S STATE OF THE CHILDREN REPORTS

STATE OF THE CHILDREN: EARLY LEARNING & CARE



Pierce County, Washington

Percent of Annual Income Spent on Child Care
2 Adults, 1 Preschooler, and 1 Infant



WASHINGTON STEM'S STATE OF THE CHILDREN REPORTS

Working Connections Child Care is a subsidy program that helps income-eligible families pay for child care. The 75th percentile represents the subsidy rate at which families can access 75 percent of the child care market.

Subsidy rates are currently far below the market rate for child care. Child care providers who accept Working Connections subsidies incur financial loss when the subsidy rate is below the actual cost to provide care. The Washington Child Care Collaborative Task Force will release a report in 2021 that will include the cost of quality care for early education programs. We will update the graphic below with those updated numbers when those reports are released.

Working Connections Reimbursement Rate vs. Cost of Quality Care



***Quality refers to the average cost of programs that have been awarded the highest levels of quality (levels 4 or 5) by Early Achievers, Washington State's Quality Rating System. This is a current estimate; however, the Department of Commerce is creating a report that will be released in 2021 that will provide more specific and regionalized estimates.*



QUESTIONS?

Dr. Jenee Myers Twitchell

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WORKFORCE EDUCATION INVESTMENT ACT: PROGRAMS

Adapted from [HB2158](#) Session law

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5. **WORKING CONNECTIONS CHILD CARE PROGRAM**
 - *WA STEM, Washington State Department of Children, Youth, and Families, SBCTC*
6. HEALTH PROFESSIONAL LOAN REPAYMENT PROGRAM – *DOH, ESD*
7. VETERAN AND NATIONAL GUARD TUITION WAIVERS – *Each eligible higher ed institution must submit a report every two years; could be further measured by ERDC*

CONSIDER: QUESTIONS TO ASK

WASHINGTON COLLEGE GRANT PROGRAM

Which jobs have projected openings and pay family-sustaining wages? How does the program impact persistence and completion? In which higher education programs? Are use and outcomes equitable across demographics? Which jobs are WA College Grant recipients landing with what wages? How do these outcomes compare to peers' outcomes who were not recipients? What does uptake and use among registered apprenticeship programs look like? With what outcomes? What are the geographical disparities of uptake and use of the grant program as well as outcomes from use?

STUDENT LOAN RELIEF

How does the program impact persistence and completion? In which higher education programs? Which students in which occupations have highest debt load as compared to average regional wage? How is debt load disparate demographically? How does debt load and debt relief compare to average regional median income overall and by occupations inhabited by those with debt load?

CONSIDER: QUESTIONS TO ASK

WASHINGTON STATE OPPORTUNITY SCHOLARSHIP

Which jobs have projected openings and pay family-sustaining wages (especially regionally)? How does the program impact persistence and completion? In which higher education programs? Are use and outcomes equitable across demographics? Which jobs are WSOS recipients landing with what wages? How do these outcomes compare to peers' outcomes who were not recipients?

HEALTH PROFESSIONAL LOAN REPAYMENT PROGRAM

How does knowledge of the program impact persistence and completion? In which higher education programs? Which students in which occupations have highest debt load as compared to average regional wage by occup.? How is debt load disparate demographically? How does debt load and debt relief compare to average regional median income overall and by occupations inhabited by those with debt load?

VETERAN AND NATIONAL GUARD TUITION WAIVERS

What is the total use numbers of waivers? By institution? By demographic? What are the most common circumstances for use of the waiver [vs. use of GI bill or other forms of aid]? What are the outcomes (persistence, completion, employment, and wages)?

WHAT WE CAN MEASURE SO FAR FOR CCW

What we were able to measure last year for the 2020 Legislative Report:

1. What are the statewide enrollment totals for the first full quarter of implementation of CCW programming?
2. To what degree do statewide enrollments during the first snapshot of CCW implementation reach demographic parity with K-12 cohorts for categories named in CCW legislation?

What we are able to measure now (March 2021), in addition to what's outlined above:

1. What are the **unique enrollment totals for the first full year** of CCW implementation (July 2019-June 2020) for under 30-year-olds and for under 30-year-olds who have a WA K-12 record?
 - a) What are these totals *by region*?
2. To what degree do **regional enrollments** during the first full year of CCW implementation **reach demographic parity with regional K-12 cohorts** for categories named in CCW legislation?
3. What are the enrollment outcomes by industry/occupation?
 - a) What are the **enrollment outcomes by industry/occupation for each region**?
4. What are the enrollments by high school cohort year/how are we doing against our 2030 goal?